CLAIMS

1. A method of testing an electrical component, the method comprising the steps of:

performing a first test in a known environment;

calculating an expected Cyclic Redundancy Checker (CRC) value over a predetermined amount of memory after completion of the first test;

performing a second test on a device under test, the second test being substantially equivalent to the first test;

calculating an actual CRC value over a predetermined amount of memory after completion of the second test;

determining whether the expected CRC is substantially equivalent to the actual CRC;

upon a determination that the expected CRC is substantially equivalent to the actual CRC, indicating that the electrical component passed the second test; and

upon a determination that the expected CRC is not substantially equivalent to the actual CRC, indicating that the electrical component failed the second test.

2. The method of Claim 1, further comprising the step, upon a determination that the expected CRC is not substantially equivalent to the actual CRC, of performing the substeps of:

segmenting the first test case to create a segmented test case; and

repeating the steps of Claim 1.

3. The method of Claim 1, wherein the first test is performed on a host computer.

4. The method of Claim 1, wherein the second test is performed on at least one of a Dual In-line Memory Module (DIMM) and a Single In-line Memory Module (SIMM).

5. The method of Claim 1, wherein the electrical component is a Central Processing Unit (CPU).

6. The method of Claim 1, wherein the first test and the second test are boot sequences of a Central Processing Unit (CPU).

7. A method of testing a Central Processing Unit (CPU), the method comprising the steps of:

performing a test on the CPU;

calculating an actual Cyclic Redundancy Checker (CRC) value for a predetermined amount of memory;

determining whether the CRC value is substantially equivalent to an expected CRC value;

upon a determination that the expected CRC value is substantially equivalent to the actual CRC value, indicating that the CPU passed the test; and

upon a determination that the expected CRC value is not substantially equivalent to the actual CRC value, indicating that the CPU failed the test.

8. The method of Claim 7, wherein the test is performed on at least one of a Dual In-line Memory Module (DIMM) and a Single In-line Memory Module (SIMM).

9. An memory module card comprising:

a Cyclic Redundancy Checker (CRC) for determining a CRC value for a predetermined portion of memory;

one or more configuration registers for specifying the predetermined portion of memory; and

one or more internal memories for use by the CRC.

10. The memory module of Claim 9, wherein the memory module card is at least one of a Dual In-line Memory Module (DIMM) and a Single In-line Memory Module (SIMM).

11. An apparatus for testing an electrical component, the apparatus comprising:

means for performing a first test in a known environment;

means for calculating an expected Cyclic Redundancy Checker (CRC) value over a predetermined amount of memory after completion of the first test;

means for performing a second test on a device under test, the second test being substantially equivalent to the first test;

means for calculating an actual CRC value over a predetermined amount of memory after completion of the second test;

means for determining whether the expected CRC value is substantially equivalent to the actual CRC value;

upon a determination that the expected CRC value is substantially equivalent to the actual CRC value, means for indicating that the electrical component passed the second test; and

upon a determination that the expected CRC value is not substantially equivalent to the actual CRC value, means for indicating that the electrical component failed the second test.

12. The apparatus of Claim 11, further comprising, upon a determination that the expected CRC value is not substantially equivalent to the actual CRC value:

means for segmenting the first test case to create a segmented test case; and

means for repeating the elements of Claim 11.

13. The apparatus of Claim 11, wherein the means for performing the first test comprises a host computer.

14. The apparatus of Claim 11, wherein the means for performing the second test comprises at least one of a Dual In-line Memory Module (DIMM) and a Single In-line Memory Module (SIMM).

15. The apparatus of Claim 11, wherein the electrical component is a Central Processing Unit (CPU).

16. The apparatus of Claim 11, wherein the first test and the second test are boot sequences of a Central Processing Unit (CPU).

17. An apparatus for testing a Central Processing Unit (CPU), the apparatus comprising:

means for performing a test on the CPU;

means for calculating an actual Cyclic Redundancy Checker (CRC) value for a predetermined amount of memory;

means for determining whether the actual CRC value is substantially equivalent to an expected CRC value;

upon a determination that the expected CRC value is substantially equivalent to the actual CRC value, means for indicating that the CPU passed the test; and

upon a determination that the expected CRC value is not substantially equivalent to the actual CRC value, means for indicating that the CPU failed the test.

18. The apparatus of Claim 17, wherein the means for performing the test comprises on at least one of a Dual In-line Memory Module (DIMM) and a Single In-line Memory Module (SIMM).

19. A computer program product for testing an electrical component, the computer program product having a medium with a computer program embodied thereon, the computer program comprising:

computer program code for performing a first test in a known environment;

computer program code for calculating an expected Cyclic Redundancy Checker (CRC) value over a predetermined amount of memory after completion of the first test;

computer program code for performing a second test on a device under test, the second test being substantially equivalent to the first test;

computer program code for calculating an actual CRC value over a predetermined amount of memory after completion of the second test;

computer program code for determining whether the expected CRC is substantially equivalent to the actual CRC;

computer program code for, upon a determination that the expected CRC is substantially equivalent to the actual CRC, indicating that the electrical component passed the second test; and

computer program code for, upon a determination that the expected CRC is not substantially equivalent to the actual CRC, indicating that the electrical component failed the second test.

20. The computer program product of Claim 19, further comprising computer program code for, upon a determination that the expected CRC is not substantially equivalent to the actual CRC, comprising:

computer program code for segmenting the first test case to create a segmented test case; and

computer program code for repeating the steps of Claim 19.

21. The computer program product of Claim 19, wherein the electrical component is a Central Processing Unit (CPU).

22. The computer program product of Claim 19, wherein the first test and the second test are boot sequences of a Central Processing Unit (CPU).

23. A computer program product for testing a Central Processing Unit (CPU), the computer program product having a medium with a computer program embodied thereon, the computer program comprising:

computer program code for performing a test on the CPU;

computer program code for calculating an actual Cyclic Redundancy Checker (CRC) value for a predetermined amount of memory;

computer program code for determining whether the CRC value is substantially equivalent to an expected CRC value;

computer program code for, upon a determination that the expected CRC value is substantially equivalent to the actual CRC value, indicating that the CPU passed the test; and

computer program code for, upon a determination that the expected CRC value is not substantially equivalent to the actual CRC value, indicating that the CPU failed the test.